

Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1-41. (canceled)

42. (new) An alternating current electric motor, comprising:
a main winding;
an additional winding;
a capacitor connected in series relation to said additional winding;
said additional winding and said capacitor being connected in parallel relation to said main winding;

said additional winding being reversely connected with respect to said main winding so that current flows in a first direction through said main winding and in a second direction in said additional winding, said second direction being opposite to said first direction;

said main winding having a first field direction;
said additional winding having a second field direction opposite to said first field direction;
said current flowing through said main winding having a first phase angle; and
said current flowing through said additional winding having a phase angle different from said first phase angle.

43. (new) The electric motor of claim 42, further comprising:
said capacitor having a capacitance directly proportional to a current drawn by said electric motor at full load and inversely proportional to the square of the line voltage supplied to said electric motor.

44. (new) The electric motor of claim 43, further comprising:
said capacitor having a capacitance in microfarads determined by multiplying said current drawn by said electric motor at full load by a constant to obtain a result, and dividing that result by said square of said line voltage supplied to said electric motor.

45. (new) The electric motor of claim 44, further comprising:
said constant being in a range from about 0.250×10^6 to 0.300×10^6 .
46. (new) The electric motor of claim 42, further comprising:

said main winding formed of wire having a cross-sectional area greater than a cross-sectional area of wire that forms said additional winding.

47. (new) The electric motor of claim 46, further comprising:

said cross-sectional area of said wire that forms said main winding having a cross-sectional area that is greater than said cross-sectional area of said wire that forms said additional winding by a predetermined ratio.

48. (new) The electric motor of claim 44, further comprising:

said predetermined ratio being 2/3 to 1/3.

49. (new) The electric motor of claim 42, further comprising:

said first conductor having a first length;

said second conductor having a second length; and

said first length being greater than said second length.

50. (new) The electric motor of claim 49, further comprising:

said second length being about half the length of said first length.

51. (new) A single phase electric motor, comprising:

first and second main windings each having a first end electrically connected to a common point and each having a second end electrically connected to first and second potential lines of a line voltage;

first and second additional windings connected in series to a winding capacitor and each having a second end electrically connected to said first and second potential lines of a line voltage;

said first and second additional windings and said winding capacitor being electrically connected to said first and second main windings in parallel and in reversely connected relation thereto so that the field generated by said first and second main windings is opposite to the field generated by said first and second additional windings;

said winding capacitor causing the respective phase angles of the current flowing through said first and second main windings to be different from the respective phase angles of the current flowing through said first and second additional windings;

said winding capacitor having a capacitance directly proportional to a current drawn by said electric motor at full load and inversely proportional to the square of the line voltage supplied to said electric motor.

52. (new) The electric motor of claim 51, further comprising:
said capacitor having a capacitance in microfarads determined by multiplying said current drawn by said electric motor at full load by a constant to obtain a result, and dividing that result by said square of said line voltage supplied to said electric motor.

53. (new) The electric motor of claim 52, further comprising:
said constant being in a range from about 0.250×10^6 to 0.300×10^6 .

54. (new) The electric motor of claim 51, further comprising:
said main winding formed of wire having a cross-sectional area greater than a cross-sectional area of wire that forms said additional winding.

55. (new) The electric motor of claim 51, further comprising:
said cross-sectional area of said wire that forms said main wiring having a cross-sectional area that is greater than said cross-sectional area of said wire that forms said additional winding by a predetermined ratio.

56. (new) The electric motor of claim 55, further comprising:
said predetermined ratio being 2/3 to 1/3.

57. (new) The electric motor of claim 51, further comprising:
said first conductor having a first length;
said second conductor having a second length; and
said first length being greater than said second length.

58. (new) The electric motor of claim 57, further comprising:
said second length being about half the length of said first length.

59. (new) A multiphase electric motor, comprising:
a plurality of main windings connected in a delta configuration;
a plurality of additional windings, each of which is associated with a main winding of said plurality of main windings;
each additional winding of said plurality of additional windings being reversely connected with respect to each main winding of said plurality of main windings so that current flowing through each main winding flows in a direction opposite to the current flowing through each additional winding;
a capacitor connected in series relation to each additional winding of said plurality of additional windings so that each additional winding has a capacitor associated with it;

each additional winding and associated capacitor being connected in a delta configuration in parallel relation to said associated main winding of said plurality of main windings;

each main winding having a field direction opposite to a field direction of each additional winding; and

said current flowing through each of said additional windings and associated capacitor having a phase angle different from said current flowing through each of said main windings;

said capacitor having a capacitance directly proportional to a current drawn by said electric motor at full load and inversely proportional to the square of the line voltage supplied to said electric motor.

60. (new) The electric motor of claim 59, further comprising:

said capacitor having a capacitance in microfarads determined by multiplying said current drawn by said electric motor at full load by a constant to obtain a result, and dividing that result by said square of said line voltage supplied to said electric motor.

61. (new) The electric motor of claim 60, further comprising:

said constant being in a range from about 0.250×10^6 to 0.300×10^6 .

62. (new) The electric motor of claim 59, further comprising:

said main winding formed of wire having a cross-sectional area greater than a cross-sectional area of wire that forms said additional winding.

63. (new) The electric motor of claim 62, further comprising:

said cross-sectional area of said wire that forms said main wiring having a cross-sectional area that is greater than said cross-sectional area of said wire that forms said additional winding by a predetermined ratio.

64. (new) The electric motor of claim 63, further comprising:

said predetermined ratio being 2/3 to 1/3.

65. (new) The electric motor of claim 59, further comprising:

said first conductor having a first length;

said second conductor having a second length; and

said first length being greater than said second length.

66. (new) The electric motor of claim 65, further comprising:

said second length being about half the length of said first length.

67. (new) A multiphase electric motor, comprising:

a plurality of main windings connected in a star configuration;
a plurality of additional windings, each of which is associated with a main winding of said plurality of main windings;
each additional winding of said plurality of additional windings being reversely connected with respect to each main winding of said plurality of main windings so that current flowing through each main winding flows in a direction opposite to the current flowing through each additional winding;
a capacitor connected in series relation to each additional winding of said plurality of additional windings so that each additional winding has a capacitor associated with it;
each additional winding and associated capacitor being connected in a star configuration in parallel relation to said associated main winding of said plurality of main windings;
each main winding having a field direction opposite to a field direction of each additional winding; and
said current flowing through each of said additional windings and associated capacitor having a phase angle different from said current flowing through each of said main windings.

68. The electric motor of claim 67, further comprising:
said capacitor having a capacitance directly proportional to a current drawn by said electric motor at full load and inversely proportional to the square of the line voltage supplied to said electric motor.

69. (new) The electric motor of claim 68, further comprising:
said capacitor having a capacitance in microfarads determined by multiplying said current drawn by said electric motor at full load by a constant to obtain a result, and dividing that result by said square of said line voltage supplied to said electric motor.

70. (new) The electric motor of claim 69, further comprising:
said constant being in a range from about 0.250×10^6 to 0.300×10^6 .

71. (new) The electric motor of claim 67, further comprising:
said main winding formed of wire having a cross-sectional area greater than a cross-sectional area of wire that forms said additional winding.

72. (new) The electric motor of claim 71, further comprising:

said cross-sectional area of said wire that forms said main wiring having a cross-sectional area that is greater than said cross-sectional area of said wire that forms said additional winding by a predetermined ratio.

73. (new) The electric motor of claim 72, further comprising:
said predetermined ratio being 2/3 to 1/3.

74. (new) The electric motor of claim 67, further comprising:
said first conductor having a first length;
said second conductor having a second length; and
said first length being greater than said second length.

75. (new) The electric motor of claim 73, further comprising:
said second length being about half the length of said first length.